

## Claims

1. Field effect transistor comprising a source, a drain and a channel, respectively formed by source, drain and channel materials, the source, drain and channel materials being selected such that, for a NMOS type transistor, the electronic affinity ( $X_d$ ) of the drain material is lower than the electronic affinity ( $X_c$ ) of the channel material and such that, for a PMOS type transistor, the upper level ( $E_d$ ) of the valence band of the drain material is higher than the upper level ( $E_c$ ) of the valence band of the channel material, transistor characterized in that, the transistor being of the normally on type, the electronic affinity ( $X_s$ ) of the source material of a NMOS transistor is higher than the electronic affinity ( $X_c$ ) of the channel material of said NMOS transistor and the upper level ( $E_s$ ) of the valence band of the source material of a PMOS transistor is lower than the upper level ( $E_c$ ) of the valence band of the channel material of said PMOS transistor.

2. Integrated circuit, characterized in that it comprises PMOS type and NMOS type field effect transistors according to claim 1.